

What is claimed is:

1. A high-frequency switch comprising:

a circuit board having two input electrodes along a first side, two output electrodes along a second side, and four connection electrodes on a surface thereof; and

four p-intrinsic-n (PIN) diodes connected to the corresponding four connection electrodes;

wherein each side of a quadrangle made by connecting the two input electrodes and the two output electrodes is at an angle other than 180° to a corresponding side of a quadrangle made by connecting the four connection electrodes.

2. The high-frequency switch of claim 1, further comprising a passive component for controlling at least one of the four PIN diodes.

3. The high-frequency switch of claim 1, wherein the first side is opposite to the second side.

4. The high-frequency switch of claim 1, wherein the circuit board comprises a laminate made of a plurality of dielectric materials.

5. The high-frequency switch of claim 4, wherein the plurality of dielectric materials are ceramics.

6. The high-frequency switch of claim 4, wherein the plurality of dielectric materials have different dielectric constants.

7. The high-frequency switch of claim 4, wherein the circuit

board is made of a laminate, the laminate including:

a first layer having the connection electrodes formed thereon; and

a second layer under the first layer, the second laminate layer having a ground pattern formed thereon.

8. The high-frequency switch of claim 7, wherein the second layer has the ground pattern in a portion other than a place directly under the connection electrodes.

9. The high-frequency switch of claim 7, wherein the second layer has the ground pattern in a portion other than a place directly under the connection electrodes and at least one of the four PIN diodes.

10. The high-frequency switch of claim 1, wherein the circuit board comprises a laminate, the laminate including:

a third layer having a signal pattern connecting the two input electrodes and the two output electrodes to the four connection electrodes; and

a second layer and a fourth layer each having a ground pattern and sandwiching the third layer.